

COC # 141

11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244
East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132
20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711

(425) 420-9200 FAX 420-9210
(509) 924-9200 924-9290
(503) 906-9200 FAX 906-9210
(541) 383-9310 FAX 382-7588

CHAIN OF CUSTODY REPORT

Work Order #: M107010

CLIENT: BRISTOL				INVOICE TO: BRISTOL												TURNAROUND REQUEST in Business Days* Organic & Inorganic Analyses <div style="display: flex; justify-content: space-around;"> <div>10 7 5 4 3 2 1 <1</div> <div>STD.</div> <div>5 4 3 2 1 <1</div> </div> Petroleum Hydrocarbon Analyses <div style="display: flex; justify-content: space-around;"> <div>5 4 3 2 1 <1</div> <div>STD.</div> </div> Please Specify <div style="border: 1px solid black; padding: 2px; display: inline-block;">OTHER</div>															
REPORT TO: ANNE KRANAWETTER				P.O. NUMBER: 21090																											
ADDRESS: AMCHITKA ISLAND, AK																															
PHONE: 907-770-0974 FAX: 770-0975																															
PROJECT NAME: AMCHITKA				REQUESTED ANALYSES																											
PROJECT NUMBER: 21090																															
SAMPLED BY:																															
CLIENT SAMPLE IDENTIFICATION		SAMPLING DATE/TIME		BTX/ug		DRO												MATRIX (W, S, O)		# OF CONT.		COMMENTS		NCA WO ID							
1. 01AMA406SL		7/3/01 1350		✓		✓												S		2											
2. 01AMA407SL		7/3/01 1355		✓		✓												S		2											
3. 01AMA408SL		7/3/01 1400		✓		✓												S		2											
4.																															
5.																															
6.																															
7.																															
8.																															
9.																															
10.																															
11.																															
12.																															
13.																															
14.																															
15.																															
RELINQUISHED BY: [Signature]				FIRM: BRISTOL				DATE: 7/3/01				TIME: 1502				RECEIVED BY: [Signature]				FIRM: NCA				DATE: 7/3				TIME: 1502			
RELINQUISHED BY:				FIRM:				DATE:				TIME:				RECEIVED BY:				FIRM:				DATE:				TIME:			
PRINT NAME:				FIRM:				DATE:				TIME:				PRINT NAME:				FIRM:				DATE:				TIME:			
ADDITIONAL REMARKS: A4 AGT UNREGULATED																				TEMP:		PAGE OF									



Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-9223
425.420.9200 fax 425.420.9210
Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
509.924.9200 fax 509.924.9290
Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132
503.906.9200 fax 503.906.9210
Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711
541.383.9310 fax 541.382.7588

7 December, 2001

Anne Kranawetter
Bristol Environmental & Engineering
2000 W International Airport C#1
Anchorage, AK 99502-1116

RE: Amchitka

Enclosed are the results of analyses for samples received by the laboratory on 07/03/01 15:02. If you have any questions concerning this report, please feel free to contact me.

This report was recreated from a previously issued final report in order to provide an electronic copy. The final report used for these electronic copies may have been previously issued as an amended report due to client requested changes to sample names, etc. No data has changed since submission of the previously issued final, or amended, report.

Sincerely,

Stephen Wilson
Environmental Group Leader

Work Orders included in this report:

M107010



Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-9223
425.420.9200 fax 425.420.9210
Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
509.924.9200 fax 509.924.9290
Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132
503.906.9200 fax 503.906.9210
Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711
541.383.9310 fax 541.382.7588

Bristol Environmental & Engineering
2000 W International Airport C#1
Anchorage, AK 99502-1116

Project: Amchitka
Project Number: 21090
Project Manager: Anne Kranawetter

Reported:
07/04/01 18:33

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
01AMA406SL	M107010-01	Soil	07/03/01 13:50	07/03/01 15:02
01AMA407SL	M107010-02	Soil	07/03/01 13:55	07/03/01 15:02
01AMA408SL	M107010-03	Soil	07/03/01 14:00	07/03/01 15:02

COC #141

North Creek Analytical - Mobile Lab

Stephen Wilson, Environmental Group Leader

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

North Creek Analytical, Inc.
Environmental Laboratory Network

1 of 7



Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-9223
425.420.9200 fax 425.420.9210
Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
509.924.9200 fax 509.924.9290
Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132
503.906.9200 fax 503.906.9210
Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711
541.383.9310 fax 541.382.7588

Bristol Environmental & Engineering
2000 W International Airport C#1
Anchorage, AK 99502-1116

Project: Amchitka
Project Number: 21090
Project Manager: Anne Kranawetter

Reported:
07/04/01 18:33

Diesel Hydrocarbons (C10-C25) per AK102
North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMA406SL (M107010-01) Soil					Sampled: 07/03/01 Received: 07/03/01				
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	07/03/01	07/03/01	0107015	
Surr: 1-Chlorooctadecane	82.8 %	50-150							
Surr: Triacontane	85.2 %	50-150							
01AMA407SL (M107010-02) Soil					Sampled: 07/03/01 Received: 07/03/01				
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	07/03/01	07/03/01	0107015	
Surr: 1-Chlorooctadecane	79.5 %	50-150							
Surr: Triacontane	87.4 %	50-150							
01AMA408SL (M107010-03) Soil					Sampled: 07/03/01 Received: 07/03/01				
Diesel Range Organics	ND	150	mg/kg dry	1	AK 102	07/03/01	07/03/01	0107015	
Surr: 1-Chlorooctadecane	58.0 %	50-150							
Surr: Triacontane	54.5 %	50-150							

North Creek Analytical - Mobile Lab

Stephen Wilson, Environmental Group Leader

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

North Creek Analytical, Inc.
Environmental Laboratory Network

2 of 7



Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-9223
425.420.9200 fax 425.420.9210
Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
509.924.9200 fax 509.924.9290
Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132
503.906.9200 fax 503.906.9210
Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711
541.383.9310 fax 541.382.7588

Bristol Environmental & Engineering
2000 W International Airport C#1
Anchorage, AK 99502-1116

Project: Amchitka
Project Number: 21090
Project Manager: Anne Kranawetter

Reported:
07/04/01 18:33

BTEX, MTBE and Naphthalene per EPA Method 8021B

North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMA406SL (M107010-01) Soil					Sampled: 07/03/01 Received: 07/03/01				
Benzene	ND	0.0319	mg/kg dry	50	1B BTEX/MTI	07/04/01	07/04/01	0107019	
Toluene	ND	0.128	"	"	"	"	"	"	
Ethylbenzene	ND	0.128	"	"	"	"	"	"	
Xylenes (total)	ND	0.255	"	"	"	"	"	"	
Naphthalene	ND	1.28	"	"	"	"	"	"	
<i>Surr: 4-BFB</i>	80.2 %	50-150							
01AMA407SL (M107010-02) Soil					Sampled: 07/03/01 Received: 07/03/01				
Benzene	ND	0.0339	mg/kg dry	50	1B BTEX/MTI	07/04/01	07/04/01	0107019	
Toluene	ND	0.136	"	"	"	"	"	"	
Ethylbenzene	ND	0.136	"	"	"	"	"	"	
Xylenes (total)	ND	0.272	"	"	"	"	"	"	
Naphthalene	ND	1.36	"	"	"	"	"	"	
<i>Surr: 4-BFB</i>	78.7 %	50-150							
01AMA408SL (M107010-03) Soil					Sampled: 07/03/01 Received: 07/03/01				
Benzene	ND	0.0489	mg/kg dry	50	1B BTEX/MTI	07/04/01	07/04/01	0107019	
Toluene	ND	0.196	"	"	"	"	"	"	
Ethylbenzene	ND	0.196	"	"	"	"	"	"	
Xylenes (total)	ND	0.391	"	"	"	"	"	"	
Naphthalene	ND	1.96	"	"	"	"	"	"	
<i>Surr: 4-BFB</i>	73.8 %	50-150							

North Creek Analytical - Mobile Lab

Stephen Wilson, Environmental Group Leader

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

North Creek Analytical, Inc.
Environmental Laboratory Network



Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-9223
425.420.9200 fax 425.420.9210
Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
509.924.9200 fax 509.924.9290
Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132
503.906.9200 fax 503.906.9210
Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711
541.383.9310 fax 541.382.7588

Bristol Environmental & Engineering
2000 W International Airport C#1
Anchorage, AK 99502-1116

Project: Amchitka
Project Number: 21090
Project Manager: Anne Kranawetter

Reported:
07/04/01 18:33

Physical Parameters per APHA/ASTM/EPA Methods
North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMA406SL (M107010-01) Soil					Sampled: 07/03/01 Received: 07/03/01				
% Solids	85.7	0.0100 % by Weight		1	Gravimetric	07/03/01	07/04/01	0107020	
01AMA407SL (M107010-02) Soil					Sampled: 07/03/01 Received: 07/03/01				
% Solids	88.1	0.0100 % by Weight		1	Gravimetric	07/03/01	07/04/01	0107020	
01AMA408SL (M107010-03) Soil					Sampled: 07/03/01 Received: 07/03/01				
% Solids	91.7	0.0100 % by Weight		1	Gravimetric	07/03/01	07/04/01	0107020	

North Creek Analytical - Mobile Lab

Stephen Wilson, Environmental Group Leader

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

North Creek Analytical, Inc.
Environmental Laboratory Network



Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-9223
425.420.9200 fax 425.420.9210
Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
509.924.9200 fax 509.924.9290
Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132
503.906.9200 fax 503.906.9210
Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711
541.383.9310 fax 541.382.7588

Bristol Environmental & Engineering
2000 W International Airport C#1
Anchorage, AK 99502-1116

Project: Amchitka
Project Number: 21090
Project Manager: Anne Kranawetter

Reported:
07/04/01 18:33

Diesel Hydrocarbons (C10-C25) per AK102 - Quality Control

North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	----------------	-----	--------------	-------

Batch 0107015 - 3545 ASE

Blank (0107015-BLK1)

Prepared & Analyzed: 07/03/01

Diesel Range Organics	ND	150	mg/kg wet						
Surr: 1-Chlorooctadecane	18.8		"	23.7		79.3	50-150		
Surr: Triacontane	20.1		"	23.5		85.5	50-150		

LCS (0107015-BS1)

Prepared & Analyzed: 07/03/01

Diesel Range Organics	1400	150	mg/kg wet	1250		112	75-125		
Surr: 1-Chlorooctadecane	23.0		"	23.7		97.0	50-150		
Surr: Triacontane	21.1		"	23.5		89.8	50-150		

LCS Dup (0107015-BSD1)

Prepared & Analyzed: 07/03/01

Diesel Range Organics	1370	150	mg/kg wet	1250		110	75-125	2.17	20
Surr: 1-Chlorooctadecane	18.9		"	23.7		79.7	50-150		
Surr: Triacontane	21.4		"	23.5		91.1	50-150		

Matrix Spike (0107015-MS1)

Source: M107004-01

Prepared & Analyzed: 07/03/01

Diesel Range Organics	2050	150	mg/kg dry	1370	322	126	60-140		
Surr: 1-Chlorooctadecane	26.1		"	25.9		101	50-150		
Surr: Triacontane	23.1		"	25.7		89.9	50-150		

North Creek Analytical - Mobile Lab

Stephen Wilson, Environmental Group Leader

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

North Creek Analytical, Inc.
Environmental Laboratory Network



Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-9223
425.420.9200 fax 425.420.9210
Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
509.924.9200 fax 509.924.9290
Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132
503.906.9200 fax 503.906.9210
Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711
541.383.9310 fax 541.382.7588

Bristol Environmental & Engineering
2000 W International Airport C#1
Anchorage, AK 99502-1116

Project: Amchitka
Project Number: 21090
Project Manager: Anne Kranawetter

Reported:
07/04/01 18:33

BTEX, MTBE and Naphthalene per EPA Method 8021B - Quality Control

North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	----------------	-----	--------------	-------

Batch 0107019 - MeOH Extraction

Blank (0107019-BLK1)

Prepared & Analyzed: 07/04/01

Benzene	ND	0.0250	mg/kg wet
Toluene	ND	0.100	"
Ethylbenzene	ND	0.100	"
Xylenes (total)	ND	0.200	"
Naphthalene	ND	1.00	"

Surr: 4-BFB 2.30 " 2.50 92.0 50-150

LCS (0107019-BS1)

Prepared & Analyzed: 07/04/01

Benzene	2.02	0.0250	mg/kg wet	2.50	80.8	69-138
Toluene	2.20	0.100	"	2.50	88.0	53-151
Ethylbenzene	2.47	0.100	"	2.50	98.8	61-141
Xylenes (total)	7.07	0.200	"	7.50	94.3	62-141
Naphthalene	2.51	1.00	"	2.50	100	65-135

Surr: 4-BFB 2.57 " 2.50 103 50-150

North Creek Analytical - Mobile Lab

Stephen Wilson, Environmental Group Leader

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

North Creek Analytical, Inc.
Environmental Laboratory Network



Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-9223
425.420.9200 fax 425.420.9210
Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
509.924.9200 fax 509.924.9290
Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132
503.906.9200 fax 503.906.9210
Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711
541.383.9310 fax 541.382.7588

Bristol Environmental & Engineering
2000 W International Airport C#1
Anchorage, AK 99502-1116

Project: Amchitka
Project Number: 21090
Project Manager: Anne Kranawetter

Reported:
07/04/01 18:33

Notes and Definitions

DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
dry Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.
wet Sample results reported on a wet weight basis (as received)
RPD Relative Percent Difference

North Creek Analytical - Mobile Lab

Stephen Wilson, Environmental Group Leader

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Items for Project Manager Review

LabNumber	Analysis	Analyte	Exception
			Report recreated from: \\sisters\elmnt\Report\M107010 FINAL 07 04 01 1833.mdb Default Report (not modified)